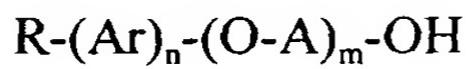


**WHAT IS CLAIMED:**

1. A alkyl-substituted aryl polyalkoxylate of the formula



where

R is a polyalkene radical derived from C<sub>2</sub>- to C<sub>20</sub>-alkenes and having a number average molecular weight of from about 200 to about 5,000;

Ar is selected from a phenylene group, a substituted phenylene group, and a polynuclear aromatic group;

A is an alkylene group of 2 to 8 carbon atoms;

m is a number up to 200; and

n is 1 or 2.

2. An alkyl-substituted aryl polyalkoxylate as claimed in claim 1, in which R is a polybutyl or polyisobutyl radical derived from isobutene and up to about 20 percent by weight of *n*-butene and having a number average molecular weight of from about 200 to about 2500.

3. An alkyl-substituted aryl polyalkoxylate as claimed in claim 1, in which R is a polybutyl or polyisobutyl radical having a number average molecular weight of from about 400 to about 1250.

4. An alkyl-substituted aryl polyalkoxylate as claimed in claim 1, in which R is a polybutyl or polyisobutyl radical having a number average molecular weight of from about 450 to about 1000.

5. An alkyl-substituted aryl polyalkoxylate as claimed in claim 1, in which m is a number up to about 45.

6. An alkyl-substituted aryl polyalkoxylate as claimed in claim 1, in which A is 1,2-propylene and/or 1,2-butylene.

7. An alkyl-substituted aryl polyalkoxylate as claimed in claim 1, in which Ar is a phenol.

8. An alkyl-substituted aryl polyalkoxylate as claimed in claim 1, in which Ar is a hydrocarbon-substituted phenol.

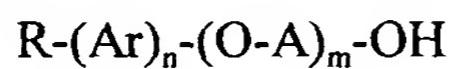
9. An alkyl-substituted aryl polyalkoxylate as claimed in claim 1, in which Ar is a cresol.

10. An alkyl-substituted aryl polyalkoxylate as claimed in claim 1, in which Ar is a hydrocarbon-substituted cresol.

11. A fuel additive concentrate comprising an alkyl-substituted aryl polyalkoxylate of claim 1 in an amount of from about 0.1 to about 80% by weight.

SEARCHED  
INDEXED  
MAILED  
FILED

12. A fuel additive concentrate comprising an alkyl-substituted aryl polyalkoxylate of claim 1 in an amount of from about 0.5 to about 60% by weight.
13. A fuel composition comprising an alkyl-substituted aryl polyalkoxylate of claim 1, and a fuel.
14. The composition of claim 13, wherein the fuel is gasoline.
15. The composition of claim 13, wherein the fuel is diesel fuel.
16. The composition of claim 13, wherein the fuel is burner fuel.
17. The composition of claim 13, wherein the fuel is jet fuel.
18. A process for reducing the formation of intake valve deposits in a gasoline engine, comprising combusting in a gasoline engine having intake valves a fuel composition comprising a gasoline fuel and an alkyl-substituted aryl polyalkoxylate of the formula



where

R is a polyalkene radical derived from C<sub>2</sub>- to C<sub>20</sub>-alkenes and having a number average molecular weight of from about 200 to about 5,000;

Ar is selected from a phenylene group, a substituted phenylene group, and a polynuclear aromatic group;

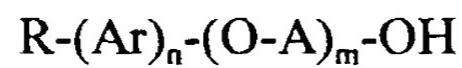
A is an alkylene group of 2 to 8 carbon atoms;

m is a number up to 200; and

n is 1 or 2,

whereby the amount of deposits formed on the intake valves are reduced relative to the amount of deposits formed on the intake valves when the fuel composition combusted in the engine does not comprise the alkyl-substituted aryl polyalkoxylate.

19. A process for reducing the valve sticking in a gasoline engine, comprising combusting in a gasoline engine having intake valves a fuel composition comprising a gasoline fuel and an alkyl-substituted aryl polyalkoxylate of the formula



where

R is a polyalkene radical derived from C<sub>2</sub>- to C<sub>20</sub>-alkenes and having a number average molecular weight of from about 200 to about 5,000;

Ar is selected from a phenylene group, a substituted phenylene group, and a polynuclear aromatic group;

A is an alkylene group of 2 to 8 carbon atoms;

m is a number up to 200; and

n is 1 or 2,

whereby the amount of sticking of the intake valves is reduced relative to the amount of sticking of the intake valves when the fuel composition combusted in the engine does not comprise the alkyl-substituted aryl polyalkoxylate.

20. The composition of claim 13, further comprising a detergent.

21. The composition of claim 20, wherein the detergent is selected from polyisobuteneamines, hydroxyl-containing polyisobuteneamines, polyetheramines, and polyalkenyl Mannich bases.

22. The composition of claim 20, wherein the detergent is a polyalkenyl Mannich base.

23. The composition of claim 20, further comprising one or more components selected from alkali metal salts of carboxylic acids or esters, alkaline earth metal salts of carboxylic acids or esters, alkali metal salts of sulfosuccinic acids or esters, alkaline earth metal salts of sulfosuccinic acids or esters, diluents, corrosion inhibitors, film-forming ammonium salts of organic carboxylic acids or esters, heterocyclic aromatics, antioxidants, stabilizers, demulsifiers, antistatic agents, metallocenes, lubricity additives, and markers.